

### AMENDMENT

Entry of the following amendment is respectfully requested.

#### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims:**

1. (currently amended) A mirrored storage volume system, capable of incoherency correction, comprising:
  - a primary storage controller capable of managing data, wherein the primary storage controller is capable of cyclic redundancy checking stored data;
  - a primary storage volume suitable for storing data, wherein the primary storage volume is linked to the primary controller such that, the primary storage controller is capable of cyclic redundancy checking data stored on the primary storage volume;
  - a secondary storage controller capable of accepting transferred data from the primary storage controller, wherein the secondary controller is capable of cyclic redundancy checking stored data;
  - a secondary storage volume linked to the secondary storage controller wherein the secondary storage volume is capable of storing data mirroring the primary storage volume; and
  - a communication channel linking the primary controller to the secondary controller wherein the communication channel is suitable for communicating data transfers, the secondary storage controller initiates a cyclic redundancy check of the secondary storage volume upon reestablishment after an interruption in the communication channel, the secondary storage controller compares the primary cyclic redundancy check scan with the secondary cyclic redundancy check scan and requests non-matching data blocks.

2. (original) The mirrored storage volume system of claim 1, wherein the primary storage controller initiates a cyclic redundancy check of the primary storage volume upon reestablishment after an interruption in the communication channel.
3. (original) The mirrored storage volume of claim 2, wherein the primary controller is capable of comparing the primary cyclic redundancy check scan with a secondary storage volume cyclic redundancy check scan.
4. (canceled)
5. (canceled)
6. (original) The mirrored storage volume system as claimed in claim 1, wherein the primary storage controller initiates a cyclic redundancy check scan at a set time period.
7. (original) The mirrored storage volume system as claimed in claim 6, wherein the cyclic redundancy check scan is a low priority operation.
8. (original) The mirrored storage volume system of claim 1, wherein the primary storage controller is capable of directing the primary storage volume to read and write data.
9. (original) The mirrored storage volume system of claim 1, wherein the secondary storage volume is geographically remote from the primary storage volume.
10. (previously presented) The mirrored storage volume system of claim 1, further

comprising a volatile memory linked to the primary storage controller, wherein the volatile memory is configured to maintain a coarse grain bit map if the communication channel is interrupted.

11. (canceled)

12. (original) The mirrored storage volume of claim 10, wherein the coarse grain bitmap contains data representing changes to the primary storage volume.

13-20. (Canceled)

21. (currently amended) A mirrored storage volume system, capable of incoherency correction, comprising:

- a primary storage controller capable of managing data, wherein the primary storage controller is capable of at least one of a MD-5 and a SHA-1 scan of stored data;

- a primary storage volume suitable for storing data, wherein the primary storage volume is linked to the primary controller such that, the primary storage controller is capable of conducting at least one of a MD-5 and a SHA-1 scan on data stored on the primary storage volume;

- a secondary storage controller capable of accepting transferred data from the primary storage controller, wherein the secondary controller is capable of at least one of a MD-5 and a SHA-1 scan of stored data;

- a secondary storage volume linked to the secondary storage controller wherein the secondary storage volume is capable of storing data mirroring the primary storage volume; and

- a communication channel linking the primary controller to the secondary controller wherein the communication channel is suitable for communicating data transfers, the

primary storage controller initiates a scan at a set time period, the scan being a low priority operation.

22. (original) The mirrored storage volume system of claim 21, wherein the primary storage controller initiates of at least one of a MD-5 and a SHA-1 scan of the primary storage volume upon reestablishment after an interruption in the communication channel.

23. (original) The mirrored storage volume of claim 22, wherein the primary controller is capable of comparing the primary scan with a secondary storage volume scan.

24. (original) The mirrored storage volume system of claim 21, wherein the secondary storage controller initiates at least one of a MD-5 and a SHA-1 scan of the secondary storage volume upon reestablishment after an interruption in the communication channel.

25. (original) The mirrored storage volume system of claim 24, wherein the secondary storage controller compares the primary scan with the secondary scan and requests non-matching data blocks.

26. (canceled)

27. (canceled)

28. (original) The mirrored storage volume system of claim 21, wherein the primary storage controller is capable of directing the primary storage volume to read and write data.

29. (original) The mirrored storage volume system of claim 21, wherein the secondary storage volume is geographically remote from the primary storage volume.

30. (original) The mirrored storage volume system of claim 21, further comprising a volatile memory linked to the primary storage controller, wherein the volatile memory is suitable for maintaining a coarse grain bit map.

31. (original) The mirrored storage volume of claim 30, wherein the volatile memory is capable of maintaining the coarse grain bitmap if the communication channel is interrupted.

32. (original) The mirrored storage volume of claim 30, wherein the coarse grain bitmap contains data representing changes to the primary storage volume.

33-34. (canceled)

35. (new) A mirrored storage volume system, capable of incoherency correction, comprising:

- a primary storage controller capable of managing data, wherein the primary storage controller is capable of cyclic redundancy checking stored data;

- a primary storage volume suitable for storing data, wherein the primary storage volume is linked to the primary controller such that, the primary storage controller is capable of cyclic redundancy checking data stored on the primary storage volume;

- a secondary storage controller capable of accepting transferred data from the primary storage controller, wherein the secondary controller is capable of cyclic redundancy checking stored data;

- a secondary storage volume linked to the secondary storage controller wherein the secondary storage volume is capable of storing data mirroring the primary storage volume; and

a communication channel linking the primary controller to the secondary controller wherein the communication channel is suitable for communicating data transfers, the primary storage controller initiates a cyclic redundancy check scan at a set time period, the cyclic redundancy check scan being a low priority operation.

36. (new) The mirrored storage volume system of claim 35, wherein the primary storage controller initiates a cyclic redundancy check of the primary storage volume upon reestablishment after an interruption in the communication channel.

37. (new) The mirrored storage volume of claim 36, wherein the primary controller is capable of comparing the primary cyclic redundancy check scan with a secondary storage volume cyclic redundancy check scan.

38. (new) The mirrored storage volume system of claim 35, wherein the secondary storage controller initiates a cyclic redundancy check of the secondary storage volume upon reestablishment after an interruption in the communication channel.

39. (new) The mirrored storage volume system of claim 38, wherein the secondary storage controller compares the primary cyclic redundancy check scan with the secondary cyclic redundancy check scan and requests non-matching data blocks.

40. (new) A mirrored storage volume system, capable of incoherency correction, comprising:

- a primary storage controller capable of managing data, wherein the primary storage controller is capable of at least one of a MD-5 and a SHA-1 scan of stored data;

- a primary storage volume suitable for storing data, wherein the primary storage volume is linked to the primary controller such that, the primary storage

controller is capable of conducting at least one of a MD-5 and a SHA-1 scan on data stored on the primary storage volume;

a secondary storage controller capable of accepting transferred data from the primary storage controller, wherein the secondary controller is capable of at least one of a MD-5 and a SHA-1 scan of stored data;

a secondary storage volume linked to the secondary storage controller wherein the secondary storage volume is capable of storing data mirroring the primary storage volume; and

a communication channel linking the primary controller to the secondary controller wherein the communication channel is suitable for communicating data transfers, the secondary storage controller initiates at least one of a MD-5 and a SHA-1 scan of the secondary storage volume upon reestablishment after an interruption in the communication channel, the secondary storage controller compares the primary scan with the secondary scan and requests non-matching data blocks.

41. (new) The mirrored storage volume system of claim 40, wherein the primary storage controller is capable of directing the primary storage volume to read and write data.

42. (new) The mirrored storage volume system of claim 40, wherein the secondary storage volume is geographically remote from the primary storage volume.

43. (new) The mirrored storage volume system of claim 40, further comprising a volatile memory linked to the primary storage controller, wherein the volatile memory is suitable for maintaining a coarse grain bit map.

44. (new) The mirrored storage volume of claim 43, wherein the volatile memory is capable of maintaining the coarse grain bitmap if the communication channel is interrupted.

45. (new) The mirrored storage volume of claim 43, wherein the coarse grain bitmap contains data representing changes to the primary storage volume.